



**Safety Data Sheet**  
**as per Regulation (EC) No. 1907/2006 (REACH), § 5 of German**  
**Hazardous Substances Ordinance (GefStoffV)**

**Natural Gas, Dried**

Revised on 30.05.2023

Version: 5.6

Substitutes version dated 09.01.2023



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Substance designation / commercial name:	Natural gas, dried Gaseous fuel as per DVGW G260, second gas family
CAS no.:	68410-63-9
REACH registration no.:	Excepting obligations for registration as per Annex V of Regulation (EC) No. 1907/2006 (REACH)
EINECS no.:	270-085-9

### 1.2 Relevant identified uses of substance or mixture and uses advised against

#### Identified uses

Energy source, raw material, fuel

#### Uses advised against

No misuse is assumed if the substance is used by competent persons taking into consideration the DVGW Rules.

We advise against any uses not specified in Section 1.

### 1.3 Details of the supplier of the safety data sheet

Manufacturer / supplier:	Open Grid Europe GmbH
Address:	Kallenbergstr. 5, 45141 Essen, Germany
Telephone:	+49 201 3642-0
Telefax:	+49 201 3642-13900
E-mail:	<a href="mailto:Safety Data Sheet@open-grid-europe.com">Safety Data Sheet@open-grid-europe.com</a>
Contact for technical information:	Gas Quality Competence Centre
Telephone:	+49 201 3642-18536
Telefax:	+49 201 3642-818536

### 1.4 Emergency telephone number

#### Central reporting office



(Open Grid Europe GmbH):	<b>+49 800 3355330</b>
Fire brigade:	<b>112</b>

## SECTION 2: Hazards identification

### 2.1 Classification of substance or mixture as per Regulation (EC) No. 1272/2008 (CLP)

Hazard class / category	Hazard statement	Classification method
Flammable gas / category 1	H220	Based on test data
Gas under pressure / compressed gas	H280	Based on test data

### 2.2 Label elements as per Regulation (EC) No. 1272/2008 (CLP)

<b>Pictograms:</b>	 	
<b>Signal word:</b>	Danger	
<b>Hazard statement:</b>	H220:	Extremely flammable gas
	H280:	Contains gas under pressure; may explode if heated
<b>Precautionary statement:</b>	P102:	Keep out of the reach of children.
	P210:	Keep away from heat / sparks / open flames / hot surfaces. No smoking.
	P243:	Take precautionary measures against static discharge.
	P377:	Leaking gas fire: do not extinguish, unless leak can be stopped safely.
	P381:	Eliminate all ignition sources if safe to do so.
<b>Reaction:</b>	P410+P403:	Protect from sunlight. Store in a well-ventilated place.
<b>Supplementary hazard information (EU):</b>	None	

### 2.3 Other hazards

Not compliant with the criteria for PBT or vPvB as per Annex XIII of Regulation (EC) No. 1907/2006 (REACH).

Together with air, forms ignitable mixtures; risk of explosion within the relevant explosion limits.

Very slight anaesthetising gas.

At high concentration levels, there is a risk of suffocation due to the displacement of oxygen.

Hazards due to pressure in the event of intended or non-intended release:  
noise, pressure waves, freezing due to icing

Odourless in non-odorised condition.

Ignited gas can result in burns. Due to the addition of associated gas components, the possibility of health hazards cannot be excluded.

Climate-effective.

Note:

Work on gas installations / pipelines may only be performed by specialist staff who are aware of the hazards involved and familiar with the necessary safety measures.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

Not applicable, product is a mixture

### 3.2 Mixtures

#### Chemical characterisation

Mixture of hydrocarbons and inert gases whose proportions can fluctuate within the following rounded-off limits.

The values in vol. % deviate only slightly from the values in mol % (mol % is the amount of substance as a percentage).

#### Hazardous substances as per Regulation (EU) No. 1272/2008 (CLP)

CAS no. / EINECS no. / INDEX no.	Chemical designation	Vol. %	Hazard class / hazard category / hazard statement
74-82-8/200-812-7 /601-001-00-4	Methane	> 75	Flammable gases / category 1 / H220 Gases under pressure / compressed gases / H280
74-84-0/200-814-8/601-002-00-X	Ethane	< 12	Flammable gases / category 1 / H220 Gases under pressure / liquefied gases / H280
74-98-6/200-827-9/601-003-00-5	Propane	< 6	Flammable gases / category 1 / H220 Gases under pressure / liquefied gases / H280
106-97-8/203-448-7/601-004-00-0	n-butane	Σ < 2	Flammable gases / category 1 / H220 Gases under pressure / liquefied gases / H280
75-28-5/200-857-2/600-004-00-0	Isobutane		Flammable gases / category 1 / H220 Gases under pressure / liquefied gases / H280
7727-37-9/231-783-9	Nitrogen <sup>1)</sup>	< 14	Gases under pressure / compressed gases – caution / H280
124-38-9/204-696-9	Carbon dioxide <sup>2)</sup>	< 6	Gases under pressure / compressed gases – caution / H280
1333-74-0/215-605-7/ 001-001-00-9	Hydrogen	< 20	Flammable gases / category 1 / H220 Gases under pressure / liquefied gases / H280

<sup>1)</sup> Indication about completeness

<sup>2)</sup> Indication due to an existing EU workplace limit

Material composition varies depending on the origin or distribution area within the limits set in table (3.1).

However, the resulting gas quality or composition must always fully comply with the requirements as per DVGW G260.



## SECTION 4: First aid measures

### 4.1 Description of First aid measures

#### 4.1.1 Natural Gas, Dried, Unpressurised

##### **After inhalation**

High concentrations may cause asphyxiation.

Remove any persons from the danger area without delay.

If necessary, alert emergency services.

If necessary, take first-aid measures including resuscitation measures.

Due to the risk of explosion, only use oxygen outside the danger area.

##### **After skin contact / burns / freezing**

No first-aid measures necessary

##### **After eye contact**

Non-irritant, no first-aid measures necessary

##### **After ingestion**

Ingestion is not a likely route of exposure.

##### **Self-protection of first-aiders**

First-aiders must ensure that they protect themselves.

#### 4.1.2 Natural Gas, Dried, under High Pressure

##### **After inhalation**

Remove any persons from the danger area without delay.

If necessary, alert emergency services.

If necessary, take first-aid measures including resuscitation measures.

Due to the risk of explosion, only use oxygen outside the danger area.

##### **After skin contact / burns / freezing**

Use a sterile dressing to cover any affected skin so that it is dry and not exposed to any pressure, and consult a doctor if necessary.

##### **After eye contact**

Alert emergency services.

Take first-aid measures.

If necessary, rinse eyes under running water only briefly, without forcing the eye lids apart.

Use a sterile dressing to cover any affected skin so that it is dry and not exposed to any pressure, and consult an eye specialist.

##### **After ingestion**

Ingestion is not a likely route of exposure.



### **Self-protection of first-aiders**

First-aiders must ensure that they protect themselves.

## **4.2 Most important symptoms and effects, both acute and delayed**

### **Main effects:**

Acute: Frostbites / freezing in the event of contact with expanding compressed gas.  
Suffocating effects at high concentration levels due to the displacement of oxygen

Chronic: No substance-related effects known

## **4.3 Indication of any immediate medical attention and special treatment needed**

Information about medical first aid:

Following eye contact with liquefied / expanding gas, further treatment by an eye specialist is necessary after rinsing the affected eyes.

Local skin freezing or hypothermia as a result of any large-scale impact can be treated in the usual manner.

Following severe inhalation, affected persons have to be provided with sufficient quantities of fresh air and inhale oxygen as soon as possible. Patients should rest quietly. Further treatment symptomatic.

Following extremely severe effects, immediate cardiopulmonary and cerebral reanimation measures may be necessary. Although methane is not known to cause cardiac sensitisation to adrenalin, caution in the application of catecholamines is recommended.

Following major exposure and whenever disruptions to the central nervous system have become noticeable, affected persons should be hospitalised in order to clarify any hypoxic damage.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media Suitable

#### **extinguishing media**

Highly suitable: dry extinguishing media

Less / conditionally suitable: carbon dioxide, water with suitable extinguishing method. Mobile carbon dioxide and water extinguishers are generally not suitable for the purpose of extinguishing gas fires.

#### **Unsuitable extinguishing media**

Foam, high-volume water jets.

### 5.2 Special hazards arising from the substance or mixture

In closed rooms, first cut off any gas emission before extinguishing flames since otherwise there is the risk that an ignitable mixture will result.

Carbon monoxide can evolve due to incomplete combustion (toxic hazard).

### 5.3 Advice for fire-fighters

Cut off any gas emission / flow.

#### **Special protective fire-fighting equipment**

If necessary, self-contained breathing apparatus, flame-retardant protective clothing, heat-protective clothing.

### 5.4 Additional Information

Ensure that fire-fighters protect themselves.

Keep away any non-involved persons.

Cordon off the danger zone; create a safety zone.

Eliminate any ignition sources.

Use water to cool the surroundings.

Cool any at-risk containers by sprinkling and, if necessary, by spraying them with water.

Exclude any possibility of re-ignition.



## **SECTION 6: Accidental release measure**

### **6.1 Personal precautions, protective equipment and emergency procedures**

#### **6.1.1 Staff not trained for emergencies**

Ensure that staff protect themselves.

Remove ignition sources.

Ensure sufficient ventilation.

In the event of any gas emission outdoors, stay on the windward side.

If necessary, evacuate the danger zone and cordon it off over a wide area; keep away any unauthorised persons.

#### **Protective equipment:**

If necessary, use personal protective equipment as specified in Section 8.

#### **Procedures to be applied in emergencies:**

As far as possible, cut off any gas emission.

#### **6.1.2 Emergency Staff**

Cut off any gas emission.

Remove ignition sources. Do not smoke.

Evacuate the danger zone and cordon it off over a wide area; keep away any unauthorised persons.

Before specialist staff enter the danger zone, use suitable instrumentation to measure the level of gas concentration in order to evidence that the atmosphere is safe.

Use personal protective equipment as specified in Section 8.

Observe emergency plans.

### **6.2 Environment precautions**

Prevent any emission into the environment.

### **6.3 Methods and material for containment and cleaning up**

#### **6.3.1 Retention**

Cut off any gas emission.

#### **6.3.2 Clean-up**

Sufficiently ventilate rooms.

#### **6.3.3 Other Information**

Create a safety zone.

Before re-entering the danger zone, use suitable instrumentation to check that the atmosphere is safe.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Note:

Natural gas is carried in closed systems (pipelines, where applicable containers).

Any intended gas release may only be performed by specialist staff.

#### **Protective measures**

Effectively prevent any uncontrolled release.

Only experienced and appropriately trained persons may handle gases which are under pressure.

Ensure that the entire gas system is regularly checked for any leaks.

#### **Measures to prevent fire and hazards due to explosive atmospheres**

When natural gas is handled and stored, explosion protection measures have to be taken (e.g. monitoring for the absence of gas using suitable instrumentation, ventilation, avoidance of ignition sources, indication of explosion protection zones / danger zones). These measures have to be defined as part of the prior risk assessment.

Reference is made to the German Hazardous Substances Ordinance (GefStoffV), the German Technical Rules for Hazardous Substances and Industrial Safety (e.g. TRGS 720 – 723, TRGS 727, TRBS 1112, Part 1), DGUV Rule 113-001 (“Explosion Protection Rules”) and the DVGW Rules.

#### **Environmental protection precautions**

Any release of natural gas should be avoided due to its impact on the climate.

Natural gas is carried in closed systems (pipelines, if necessary containers).

Any intended gas release may only be performed by specialist staff.

#### **Information on general hygiene at workplaces**

Do not eat, drink or smoke in work areas.

Use natural gas in well ventilated work areas only.

## **7.2 Conditions for safe storage, including any incompatibilities**

### **7.2.1 Factors for Risk Minimisation in Storage**

- i) Explosive atmospheres / flammability-related hazards / potential ignition sources  
Keep installations, apparatus and containers tightly closed.  
Only store natural gas in well ventilated work areas.  
Reference is made to the German Technical Rules for Hazardous Substances and Industrial Safety (e.g. TRGS 720 – 723, TRGS 727, TRBS 1112, Part 1) and DGUV Rule 113-001 (“Explosion Protection Rules”).
- ii) Incompatible substances or mixtures (methane)  
This substance must not be stored together with substances which involve possible hazardous chemical reactions.  
Risk of explosion in the event of contact with strong oxidising agents, e.g. liquid oxygen  
Containers containing natural gas must not be stored together with flammable substances or combustible materials / liquids.  
Observe TRGS 510 with regard to storage conditions and storage with other substances.

Storage class

VCI storage class: 2A

## **7.3 Specific end use(s)**

Recommendations / specific solutions for the industrial sector:

Not applicable

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Exposure limit values: national workplace limits / EU occupational exposure limits

Propane:	CAS no.: 74-98-6
Source:	TRGS 900 "Workplace Limits (Germany)"
Workplace limit:	1000 ppm (v/v) / 1800 mg/m <sup>3</sup>
Peak limit:	Exceedance factor 4, category II
Origin:	DFG
Date of amendment:	01/2006
Monitoring procedure:	TRGS 402
n-butane:	CAS no.: 106-97-8
Source:	TRGS 900 "Workplace Limits (Germany)"
Workplace limit:	1000 ppm (v/v) / 2400 mg/m <sup>3</sup>
Peak limit:	Exceedance factor 4, category II
Origin:	DFG
Date of amendment:	01/2006
Monitoring procedure:	TRGS 402
Isobutane:	CAS no.: 75-28-5
Source:	TRGS 900 "Workplace Limits (Germany)"
Workplace limit:	1000 ppm (v/v) / 2400 mg/m <sup>3</sup>
Peak limit:	Exceedance factor 4, category II
Origin:	DFG
Date of amendment:	01/2006
Monitoring procedure:	TRGS 402
Carbon dioxide:	CAS no.: 124-38-9
Source:	TRGS 900 "Workplace Limits (Germany)" or Regulation 2006/15/EC
Workplace limit:	5000 ppm (v/v) / 9100 mg/m <sup>3</sup> or 5000 ppm (v/v) / 9.000 mg/m <sup>3</sup>
Peak limit:	Exceedance factor 2, category II
Origin:	DFG, EU (the EU has specified an air limit; deviations for the defined air limit and peak limit are possible.)
Date of amendment:	01/2006
Monitoring procedure:	TRGS 402

*Note: at 20 % of the lower explosive limit (LEL), none of the workplace limits specified above are reached.*

#### **DNEL: derived non-effect level (staff)**

No information available

**PNEC: Predicted no-effect concentration**

No information available

**8.2 Exposure controls**

**8.2.1 Suitable Technical Control Equipment**

In order to avoid any exposure to natural gas, state rules and the DVGW Rules have to be observed.

In the event of any possible gas release, levels of gas concentration have to be monitored in the work area or danger zone. Suitable instrumentation and measurement methods have to be applied for the purpose of monitoring gas concentration levels.

The suitability of instrumentation for a hydrogen content of up to 20% in natural gas has to be checked as part of a safety assessment.

When gas concentration levels are established:

Take any necessary protective measures in line with the risk assessment. Initiate the relevant measures in order to eliminate the hazard involved. Observe Section 6 ("Accidental Release Measures").

**8.2.2 Personal Protective Equipment**

Technical and organisational protective measures take precedence over the use of personal protective equipment. In the event of residual hazards despite technical and organisational measures, suitable protective equipment has to be used.

With regard to the required discharge capacity of personal protective equipment, reference is made to the TRGS 727, Section 7.

**8.2.2.1 Eye / Face Protection**

Safety glasses / goggles.

**8.2.2.2 Skin Protection**

In the case of any work on gas installations or containers, suitable measures for protection against injuries have to be taken (e.g. the wearing of protective gloves, hard hats, conductive safety footwear, flame-retardant protective clothing as specified by DIN EN ISO 11612, ear protection); see also DGUV-R 100-500, Section 2.31.

**8.2.2.3 Respiratory Protection**

Suitable respiratory protection equipment has to be used in line with the results of the risk assessment.

Whenever filter devices are unsuitable for protection purposes (e.g. if the oxygen level in breathing air is less than 17 vol. % or in the event of unknown ambient conditions), self-contained breathing apparatus has to be used.

**8.2.3 Limitation and Control of Environmental Exposure**

Any release of natural gas should be avoided due to its impact on the climate.

In order to avoid any release of natural gas, the DVGW Rules have to be observed.

**Instructive measures to prevent exposure**

Observe emission limits; if necessary, provide exhaust air decontamination.

## SECTION 9: Physical and chemical properties

### 9.1 Information about basic physical and chemical properties

The relevant physical and chemical properties depend on the composition of natural gas which may fluctuate within a relatively broad range. Hence, the following table specifies the ranges of the physical and chemical properties involved. The pressure-dependent parameters refer to an absolute pressure of 101.3 kPa.

Physical state at 25 °C / 101.3 kPa:	gaseous
a) Colour:	colourless
b) Odour:	odourless
c) Odour threshold:	if necessary, odorised as per DVGW G280-1
d) pH value:	not applicable
e) Melting point / freezing point:	-183 °C (methane)
f) Boiling point and boiling range:	not applicable
g) Flash point:	not applicable
h) Evaporation rate at 25 °C:	not applicable
i) Flammability (solid / gaseous):	yes
j) Explosion limits in air at 20 °C (DIN EN 1839):	4.2 vol. % to 20.2 vol. % (20% H <sub>2</sub> in methane)
k) Vapour pressure at 25 °C:	not applicable
l) Gas density at 0 °C / 101.3 kPa:	0.7 kg/m <sup>3</sup> to 1.0 kg/m <sup>3</sup>
m) Relative density (air = 1):	0.55 to 0.75
n) Water solubility at 20 °C:	0.03 m <sup>3</sup> /m <sup>3</sup> to 0.08 m <sup>3</sup> /m <sup>3</sup>
o) Partition coefficient: n-octanol-water [log K <sub>ow</sub> ]:	1.09 (methane)
p) Auto-ignition temperature (DIN 51794):	575 °C to 640 °C in combination with air
q) Decomposition temperature:	not applicable
r) Viscosity at 0 °C / 101.3 kPa:	10.9 µPas (methane)
s) Explosive properties:	possible formation of explosive gas / air mixtures
Minimum ignition power at 20 °C:	0.25 mJ (methane)
t) Oxidising properties:	non-oxidising

### 9.2 Other information

Explosion group:	II A
Temperature class:	T1
Fire class:	C

## **SECTION 10: Stability and reactivity**

### **10.1 Reactivity**

Natural gas is flammable.

When heated, gas under pressure can explode.

Together with air, it forms ignitable mixtures; risk of explosion within the explosion limits.

### **10.2 Chemical stability**

Stable under normal ambient conditions and under the temperature and pressure conditions expected during transportation.

### **10.3 Possibility of hazardous reactions**

Hazards due to incompatible substances or mixtures as defined by Section 7.2.

### **10.4 Conditions to avoid**

Ignitable mixtures in combination with ignition sources.

### **10.5 Incompatible materials**

Substances or mixtures as defined by Section 7.2.

### **10.6 Hazardous decomposition products**

Carbon monoxide may evolve due to incomplete combustion (toxicological risk).

## **SECTION 11: Toxicological information**

### **11.1 Information about toxicological effects**

#### **Acute toxicity**

Not acutely toxic

#### **Caustic / irritant effect on skin**

No caustic / irritant effect on skin

#### **Serious eye damage / irritation**

No serious eye damage / irritation

#### **Sensitisation of respiratory tracts / skin**

No sensitisation of respiratory tracts / skin

#### **Mutagenicity**

No effects of the product known

#### **Carcinogenicity**

No effects of the product known

#### **Reproductive toxicity**

No effects of the product known

#### **Summary of assessment of CMR properties**

No effects of the product known

#### **Specific target organ toxicity in event of non-recurrent exposure**

No effects of the product known

#### **Specific target organ toxicity in event of recurrent exposure**

No effects of the product known

#### **Aspiration risk**

No effects of the product known



## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity in fish, aquatic invertebrates, aquatic plants, soil organisms, terrestrial flora and other terrestrial non-mammals, including birds: non-toxic

Acute (short-term) toxicity:

Fish: non-toxic

Crustaceans: non-toxic

Algae / aquatic plants: non-toxic

Other organisms: non-toxic

Chronic (long-term) toxicity:

Fish: non-toxic

Crustaceans: non-toxic

Algae / aquatic plants: non-toxic

Other organisms: non-toxic

### 12.2 Persistence and degradability

The considered hydrocarbons do not hydrolyse in water.

The hydrocarbons methane, ethane, propane and butane are primarily degraded by indirect photolysis. Their degradation products are carbon dioxide and water.

Abiotic degradation:

No data available

Physical and photochemical disposal:

No data available

Biodegradation:

No data available

### 12.3 Bioaccumulation potential

Octanol-water partition coefficient (log  $K_{ow}$ ): 1.09 (methane)

Bioconcentration factor (BCF): bioaccumulation is not known for methane, ethane, propane, butane and hydrogen.

### 12.4 Mobility in soil

Known or predicted distribution in environmental compartments:

Calculation in line with Mackay, Level I, for distribution among the environmental compartments air, biota, sediments, soil and water indicates that the hydrocarbons methane, ethane, propane and butane relate 100% to the air sector.

#### **12.5 Results of PBT and vPvB assessment**

Not in compliance with the criteria for PBT or vPvB as per Annex XIII of Regulation (EC) No. 1907/2006 (REACH).

#### **12.6 Endocrine disrupting properties**

This substance does not have endocrine disrupting properties.

#### **12.7 Other adverse effects**

For methane (CH<sub>4</sub>), the global warming potential (GWP<sup>3</sup>) is 28 (as per WG I AR5 IPCC (2013)).

For hydrogen (H<sub>2</sub>), the global warming potential (GWP<sup>3</sup>) is 5.8 (as per WG I AR5 IPCC (2013)).

<sup>3</sup>) Mass-related global warming potential of methane over an observation period of 100 years. The GWP value of 28 means that one kilogram of CH<sub>4</sub> is 28 times as climate-effective as one kilogram of carbon dioxide.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

#### **13.1.1 Product / Packaging Disposal**

Natural gas is basically pipelined.

If natural gas is filled into steel cylinders or other containers, the waste code has to be individually defined by the waste producer depending on the type and condition of the packaging involved.

#### **13.1.2 Information Relevant for Waste Treatment**

No specific measures; see also Section 13.1.4.

#### **13.1.3 Information Relevant for Disposal via Sewage**

Not applicable.

#### **13.1.4 Other Disposal Recommendations**

Any release of natural gas should be avoided due to its impact on the climate.

The possibility of recycling or incineration has to be investigated in individual instances.

Natural gas can basically be discharged into the atmosphere. It should be checked whether an explosion protection zone has to be specified at the discharge opening (e.g. DVGW G442).

Alternately, large quantities of natural gas can be flared under control.

It has to be ensured that possible emission limits specified by local rules or operating permits are adhered to.

## SECTION 14: Transport information

Natural gas is basically pipelined.

If natural gas is filled into steel cylinders or other containers and is to be prepared for transport or transported, the relevant regulations relevant to the respective mode of transport and the containers used have to be established individually.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations / legislation for the substance or mixture

#### **Water hazard class:**

Class: not hazardous to water according to the German Ordinance on Installations Handling Substances Hazardous to Water (AwSV), Annex 1, No. 2.2

#### **EU regulations:**

Authorisations and / or restrictions for use

Authorisations: Regulation (EC) No. 1907/2006 – REACH

Restrictions for use: Regulation (EC) No. 1907/2006 – REACH

Regulation (EC) No. 1272/2008 – GHS / CLP

Regulation (EU) No. 453/2010 – Regulation amending Regulation (EC) No. 1907/2006

Directive 89/391/EEC – Occupational Safety and Health Framework Directive

Directive 98/24/EC – Protection of Health and Safety of Workers from Risks Related to Chemical Agents at Work

#### **National regulations (Germany)**

ArbSchG – Occupational Health and Safety Act

ChemG – Chemicals Act

JArbSchG – Young Persons Employment Act

MuSchG – Maternity Protection Act

BGV – Regulations of Employers' Liability Insurance Association

GefStoffV – Hazardous Substances Ordinance

BetrSichV – Industrial Safety Regulation

ProdSV 11 – Eleventh Ordinance for Product Safety Act (Explosion Protection Product Ordinance)

4. BImSchV – Fourth Ordinance for Implementation of the Federal Immission Control Act

GGVSEB – Ordinance on National and International Transportation of Hazardous Goods on Roads, by Railway and on Inland Waterways, Air Traffic Law



**National technical regulations (Germany)**

DGUV-R 113-001

DGUV-R 100-500 (e.g. Sections 2.31 and 2.39)

DGUV Bulletin 213-057

Technical Rules for Industrial Safety (e.g. TRBS 1112-1, TRBS 2141, TRBS 3145)

Technical Rules for Hazardous Substances (e.g. TRGS 220, TRGS 400, TRGS 407, TRGS 500, TRGS 510, TRGS 720 – 723, TRGS 725, TRGS 727, TRGS 745, TRGS 900)

Technical Rules of DVGW

**15.2. Chemical safety assessment**

A chemical safety assessment is not required.

## SECTION 16: Other information

### References to amendments

Adjustments as per TRGS 220 ("National Aspects for Creation of Safety Data Sheets")

Adjustments as per guidelines for creation of safety data sheets, European Chemicals Agency (ECHA), November 2015, December 2015, November 2016, June 2018 and December 2020.

### Abbreviations and acronyms

AGW	national occupational exposure limits
BCF	Bioconcentration factor
CLP	Regulation on Classification, Labelling and Packaging of Substances and Mixtures; Regulation (EC) No. 1272/2008
CAS no.	Chemical Abstracts Service number
DFG	German Research Foundation's Senate Commission on Checking for Substances Injurious to Health
DGUV	German Social Accident Insurance
DVGW	German Technical and Scientific Association for Gas and Water
EC	European Community
ECHA	European Chemicals Agency
EC no.	EINECS and ELINCS number (see also EINECS and ELINCS)
EEC	European Economic Community
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EN	European standard
EU	European Union
GESTIS	Hazardous Substance Database of the German Social Accident Insurance (DGUV)
GHS	Global Harmonised System
GWP	Global Warming Potential
H statement	Hazard statement
HEDSET	Harmonized Electronic Data Set
ISO	International Organization for Standardization
$K_{ow}$	Octanol-water partition coefficient
kPa	Kilopascal, physical pressure unit
LEL	Lower explosive limit
P statement	Precautionary statement
PBT	Persistent, bioaccumulable and toxic substance

REACH	Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, Regulation (EC) No. 1907/2006
TRG	Technical Rules for Pressurised Gases
TRGS	Technical Rules for Hazardous Substances
TRBS	Technical Rules for Industrial Safety
UN	United Nations
vPvB	Very persistent and very bioaccumulative

### **Important references and data sources**

HEDSET (Harmonized Electronic Data Set) Existing Substances Regulation No 793/93 (EEC) of 23 March 1993. "Natural gas, dried", EINECS no. 270-085-9, CAS no. 68410-63-9  
Kyoto Protocol/WG I AR4 IPCC

Van't Zelfde, P.; Omar, M.H.; LePair-Schroten, H.G.M.; Dokoupil, Z., Solid-liquid equilibrium diagram for the argon + methane system., Physica (Amsterdam), 1968, 38, 241-51  
GESTIS Substance Database, Institute for Occupational Safety and Health (IFA) of the German Social Accident Insurance (DGUV)

### **Classification and process used for establishing the classification of mixtures as per Regulation (EC) 1272/2008 [CLP]**

Classification on the basis of test data (see Section 2.1)

### **Key H statement (number and full wording)**

See Section 2.2.

### **Training instructions**

Briefing of staff in line with the German Occupational Health and Safety Act (ArbSchG) and the German Hazardous Substances Ordinance (GefStoffV).

The specified information exclusively describes the safety requirements of the product and is based on the state of the art. It does not warrant the properties of the described product.

This issue invalidates all previous safety data sheets for natural gas, dried.